

Product datasheet for **EA200045**

Human EGFR ELISA Kit 1 x 96

Product data:

Product Type:	ELISA Kits
Description:	Human EGFR ELISA Kit 1 x 96
Size:	1 x 96 wells
Format:	8x12 divisible strips
Assay Type:	Sandwich
Assay Length:	3.5 hours incubations; 0.5 hour washing and analyzing samples
Signal:	Colorimetric
Curve Range:	78-5000pg/ml
Sample Type:	Human serum, plasma and other biological fluids.
Sample Volume:	100µl
Specificity:	This kit is used for quantitative detection of EGFR
Sensitivity:	54pg/ml
Reactivity:	Human
Cross Reactivity:	There is no detectable cross-reactivity with other relevant proteins.
Interference:	No significant interference observed with available related molecules.
Components:	<ul style="list-style-type: none">• EGFR Monoclonal Antibody Coated 96-well Plate in foil pouch with desiccant 1 plate• Recombinant human EGFR Standard (250ng/ml) 0.1 mL• 100x Biotin conjugated EGFR Detection Antibody 0.12 mL• 100x SA-HRP Conjugate 0.12 mL• Assay Buffer 40 mL• Sample Diluent 30 mL• Wash Buffer Concentrate 20X 60 mL• TMB Substrate 12 mL• Stop Solution 12 mL• Plate Sealer 3 pieces



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Background:

Epidermal growth factor receptor (EGFR) also known as Her1, ErbB1, or ErbB, is a type I transmembrane glycoprotein with an extracellular domain (ECD) that contains two cysteine-rich regions separated by a spacer. Mature human EGFR is a 170 kDa protein that is extensively and heterogeneously modified with N-linked glycosylation. EGFR is widely expressed on epithelial cells, predominantly in the gastrointestinal tract and breast, and is required for epithelial cell development and proliferation. EGFR binds the EGF family ligands EGF, Amphiregulin, TGF- α , Betacellulin, Epiregulin, HB-EGF, and Epigen. This results in activation of the kinase domains, tyrosine autophosphorylation, and internalization of the receptor-ligand complex. EGFR signaling regulates multiple biological functions including cell proliferation, differentiation, motility, and apoptosis. Alterations in the structure, expression, and signaling of EGFR are involved in the development and metastasis of a wide variety of cancers, particularly those of epithelial origin. Soluble receptors consisting of the extracellular domain of EGFR are generated by alternate splicing in humans and mice. The ECD can also be released by proteolytic cleavage. The soluble forms retain ligand binding capability and may dimerize with membrane bound EGFR, resulting in inhibition of its tyrosine kinase activity. Levels of the soluble EGFR are elevated in the serum of cervical and gastric carcinoma patients and in the urine of squamous cell carcinoma patients. Serum EGFR elevation is also associated with responsiveness to chemotherapy in advanced colorectal cancer. In contrast, serum EGFR is reduced in ovarian carcinoma, non-small cell lung cancer, and head and neck carcinoma. A decrease of serum EGFR relative to soluble ErbB2 is associated with decreased life expectancy in patients with metastatic breast cancer.

Gene Symbol:

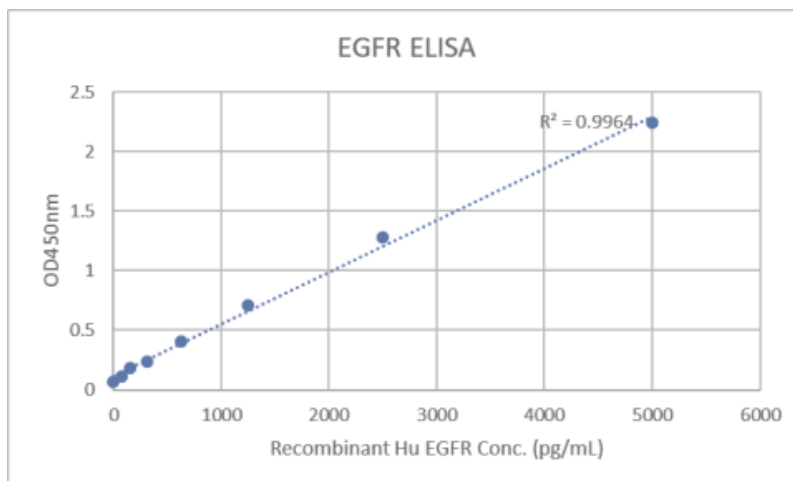
EGFR

Gene ID:

1956

Standard Curve:

□
Human EGFR ELISA Kit .

Product images:

Human EGFR ELISA Kit .